

SECTION 07 30 00 - SLOPED ROOFING UNDERLAYMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Mechanically fastened roofing underlayment.
- B. Synthetic Roofing Underlayment.
- C. Install underlayment according to manufacturer's specified installation requirements.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 07 31 13 – Asphalt Shingles.
- C. Section 07 31 26 – Slate Shingles.
- D. Section 07 31 29 - Wood Shingles and Shakes.
- E. Section 07 41 13 – Metal Roof Panels.

1.3 REFERENCES

- A. ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- B. ASTM D 570 – Standard Test Methods for Water Absorption of Plastics.
- C. ASTM D 1938 - Standard Test Methods for Tear-Propagation Resistance (Trouser Tear) of Plastic Film and Thin Sheeting by a Single-Tear Method.
- D. ASTM D 2523 - Standard Practice for Testing Load-Strain Properties of Roofing Membranes.
- E. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
- F. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials.
- G. ASTM E 108 - Standard Test Methods for Fire Tests of Roof Coverings.
- H. National Roofing Contractors Association (NRCA): Steep Slope Roofing and Waterproofing Manual.
- I. International Code Council (ICC): AC 48 - Acceptance Criteria For Roof Underlayment For Use In Severe Climate Areas.
- J. TAS 104 – Test Procedure for Nail-On Underlayment for Use in Discontinuous Roof Systems.

1.4 SUBMITTALS – must comply with Division 1

- A. Submit under provisions of Section 01 30 00.
 - 1. Product Data: Manufacturer's data sheets for each product indicated, including, certified product test results, preparation/Installation instructions and recommendations, and Storage and handling requirements and recommendations.
- B. Shop Drawings: Provide manufacturer's standard details indicating installation methods and flashing conditions applicable to the project.
- C. Selection Samples: For each product specified, provide samples representing manufacturer's full range of available colors and pattern variation.
- D. Verification Samples: For each product specified, two samples, minimum 6-by-6-inch representing actual product, color, and patterns.
- E. Sample Warranty

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Primary products specified in this section will be provided by a single manufacturer with a minimum of ten (10) years experience.
- B. Installer Qualifications: Products listed in this section are to be installed by a single installer that has demonstrated experience in installing products of the same type and scope as specified.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened containers, with identification labels intact until ready for installation.
- B. All damaged materials are to be removed from the site and replaced.

1.7 PROJECT CONDITIONS

- A. Install products only under environmental conditions within manufacturer's recommended limits.

1.8 WARRANTY

- A. Upon completion, provide an executed copy of the manufacturer's Limited Warranty to the owner or owner's representative.
 - 1. RoofTopGuard II Warranty Duration: Thirty (30) Years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Rosenlew RKW Finland
Manufacturing Address: Ulasoorintie 185 Pori, 28601
US Distributor: RKW US, Inc.
US Address: 3 Central Plaza #347, Rome, GA 30161
Phone: (706) 232 – 3027

Fax: (706) 232 – 3084

Email: morris.collins@rkwus.com

Web: <http://www.rkw-group.com>

- B. Substitutions: Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 ROOF UNDERLAYMENT

- A. Synthetic Roofing Underlayment – ROOFTOPGUARD II: 5-layer polypropylene/polyethylene synthetic roof underlayment mechanically attached to sloped roof decks beneath shingles, shakes, slate, tile, metal, and composite roofing to prevent leaks caused by wind driven rain and primary roofing breach.
1. ICC-ES Evaluated as alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-2928).
 2. Fire Rating - ASTM E 108: Class A.
 3. Color: Gray.
 4. Roll Size: 60 inches by 200 feet (1524mm x 60960mm)
 5. Permeability - ASTM E 96 Method A: 0.15 perms.
 6. Water Absorption ASTM D 570: 2.4%.
 7. Tear Resistance - ASTM D 1938: MD 16.14 lbs (7.32 kg) / CD 3.18 lbs (5.98 kg).
 8. Breaking Strength ASTM D 2523: MD 96.79 lbs (43.90 kg) / CD 86.82 lbs (39.38 kg).
 9. Breaking Strength after UV ASTM D 2523: MD 88% of new / CD 85% of new.
 10. Breaking Strength after Heat Aging ASTM D 2523: MD 98% of new / CD 91% of new
 11. Elongation Strength ASTM D 2523: MD 29% / CD 27%.
 12. Elongation Strength after UV ASTM D 2523: MD 86% of new / CD 87% of new.
 13. Elongation Strength after Heat Aging ASTM D 2523: MD 87% of new / CD 91% of new.
 14. Puncture Resistance TAS 104: No Puncture.
 15. Slippage Resistance TAS 104: No tears, slippage, or pulling way from fasteners.
 16. Water Penetration ASTM E331: No leakage around fasteners when secured per manufacturer instructions.
 17. For use under all types of sloped roofing.

2.3 RELATED MATERIALS

- A. Sealant: High quality, asbestos free plastic roofing cement meeting or exceeding the requirements of ASTM D 4586 Type I, Spec SS-153 Type 1 (Asbestos Free).
- B. Fasteners: plastic or steel cap roofing nails with minimum 1" caps.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that a roof slope of 2:12 or greater exists for proper water shedding.
- B. Begin installation only after substrates have been properly prepared.
- C. Resolve conflicts resulting from inspection prior to underlayment installation

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the manufacturer recommended methods for substrates under the project conditions

3.3 INSTALLATION

- A. Follow manufacturer's current installation guidelines, procedures found in the current version of the National Roofing Contractors Association's (NRCA) "Steep Slope Roofing and Waterproofing Manual", and requirements of all code bodies having jurisdiction. In the event of a conflict in installation requirements, the more stringent method of installation will prevail.
 - 1. RoofTopGuard II must be installed above properly ventilated spaces, as it is considered a vapor barrier.
 - 2. For roof slopes less than 4:12, Rosenlew RKW Finland recommends sealing of all seams with butyl rubber, urethane, or EPDM based caulk or tape sealant.
- B. Install RoofTopGuard II horizontally (parallel) to the eave with the printed side up, and with 4" horizontal laps and 6" vertical laps (The use of a slip sheet is not required underneath metal roofing). RoofTopGuard II must be attached to the structural Roof Deck Material using Plastic or Steel Cap roofing nails, having a minimum of 1" diameter cap, spaced at 12" on vertical and 15" on horizontal.
 - 1. For batten secured applications, the use of plastic cap roofing nails required only to secure the underlayment and prevent blow off until the batten system is installed.
 - 2. Where seams or joints require sealant or adhesive, use only a high quality, low solvent asbestos free plastic roofing cement meeting ASTM D-4586 Type 1 (Asbestos Free), Spec SS-153 Type 1 (Asbestos Free).
- C. For areas under the jurisdiction of the International Building Code or International Residential Code follow ICC-ES report ESR-2928 installation guidelines
- D. For areas under the jurisdiction of the Florida Building Code, follow the installation guidelines set forth in the evaluation report under FBC file FL12145.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Correct deficiencies in or remove products that do not comply with requirements, repair substrates, and repair or reinstall products to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Final roof cover shall be installed within XX days after installation of RoofTopGuard II.

END OF SECTION